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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/019,927

Applicant(s)

YAMADA ET AL.

Examiner

Thomas J. Cleary

Art Unit

2111

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) 6, 7, 12-15 and 17-22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 8-11 and 16 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 May 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/550e)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date 20020103; 20070412; 20080415

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-5, 8-11, and 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
3. Claim 1 recites the limitation "...detect the input plug or the source plug as the source of signal" and "the unit or the subunit receiving the signal". As there are at least five different signals referred to in the claim, it is unclear as to whether this refers to the signal input of the input plug, the signal output of the output plug, the signal input of the destination plug, the signal output of the source plug, or the signal to the unit...or to the subunit...to detect...
4. Claim 1 recites the limitation "the subunit included in the unit". There is insufficient antecedent basis for this limitation in the claim. The previous claim limitations only make reference to a subunit, and provide no limitations that the subunit is included in the unit.

5. Claim 1 recites the limitation "a subunit having...a source plug for signal output to the bus". However, Claim 1 discloses only that the unit is connected to the bus, and provides no limitations that the subunit is also connected to the bus.

6. Claim 2 recites the limitation "the unit receiving the signal". As there are at least two different signals referred to in the claim, it is unclear as to whether this refers to the signal output of the output plug or the signal to the unit... to detect...

7. Claim 2 recites the limitations of "an input plug" and "a source plug". It is unclear as to what the intended functionality or these limitations are. It is further unclear as to how an input plug differs from a source plug.

8. Claim 3 recites the limitation of "...a system comprising a) a unit having an input plug for signal input and b) an output plug...". It is unclear as to whether it is the system or the unit which has the output plug.

9. Claim 3 recites the limitation of "virtual signal output". It is unclear as to how a signal output can be a virtual signal output, as a signal by it's very nature is real.

10. Claim 3 recites the limitations of "information having the virtual signal output" and "information in the virtual signal output". It is unclear if the information is part of the virtual signal output, or if the virtual signal output is part of the information.

11. Claim 4 recites the limitation of "processing the first signal by the third unit while the second signal is being issued". However, the claim limitations only require determining if the second unit is issuing a signal, and do not require that it actually issue a signal. It is thus unclear as to whether the second signal must be issued, or whether the first signal is processed or not by the third unit if the second signal is not being issued.

12. Claim 8 recites the limitation "determining...as the result of detection is provided...". It is unclear if the determination occurs at the same time the result of detection is provided, or if the determination is a result of the detection being provided.

13. Claim 9 recites the limitation "determining...as the result of detection is provided...". It is unclear if the determination occurs at the same time the result of detection is provided, or if the determination is a result of the detection being provided.

14. Claim 9 recites the limitation "determining whether or not a signal is processed...". As there are at least five different signals referred to in Claim 1, from which Claim 9 depends, it is unclear as to whether this refers to the signal input of the

input plug, the signal output of the output plug, the signal input of the destination plug, the signal output of the source plug, or the signal to the unit...or to the subunit...to detect...

15. Claim 10 recites the limitation "determining...as the result of detection is provided...". It is unclear if the determination occurs at the same time the result of detection is provided, or if the determination is a result of the detection being provided.

16. Claim 10 recites the limitation "determining whether or not a signal is processed...". As there are at least five different signals referred to in Claim 1, from which Claim 9 depends, it is unclear as to whether this refers to the signal input of the input plug, the signal output of the output plug, the signal input of the destination plug, the signal output of the source plug, or the signal to the unit...or to the subunit...to detect...

17. Claim 11 recites the limitation "determining that the signal includes video data". As there are at least five different signals referred to in Claim 1, from which Claim 11 depends, it is unclear as to whether this refers to the signal input of the input plug, the signal output of the output plug, the signal input of the destination plug, the signal output of the source plug, or the signal to the unit...or to the subunit...to detect...

18. Claim 16 recites the limitation of "determining...whether or not the signal from the source plug of the subunit is received by the destination plug of the subunit". It is unclear as to how a signal from the source plug can be received by the destination plug, as the claim limitations state that the source plug is for providing a source of signal output to a bus.

19. The following is a quotation of the fourth paragraph of 35 U.S.C. 112:

Subject to the following paragraph, a claim in dependent form shall contain a reference to a claim previously set forth and then specify a further limitation of the subject matter claimed. A claim in dependent form shall be construed to incorporate by reference all the limitations of the claim to which it refers.

20. Claim 5 is rejected under 35 U.S.C. 112, fourth paragraph, for failing to further limit the parent claim. Claim 5 recites the limitation of "wherein the first signal is received by at least one of the second unit and the third unit". Claim 4, from which Claim 5 depends, recites the limitation of "processing the first signal by the third unit...". In order to process the first signal, the third unit must receive it. Thus, Claim 4 necessarily includes the first signal being received by at least one of the second unit and the third unit.

Claim Rejections - 35 USC § 102

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

21. Claims 1-2, 8-9, and 16 are rejected under 35 U.S.C. 102(a) as being anticipated by Applicant's Admitted Prior Art ("AAPA").

22. In reference to Claim 1, AAPA discloses a device control method in a system comprising a) a unit connected to a bus including at least one of an input plug for signal input and an output plug for providing a source of signal output (See Page 2 Lines 13-17), and b) a subunit having at least one of a destination plug for inputting a signal and a source plug for signal output to the bus (See Page 2 Lines 18-20), said method comprising the steps of: a) signaling the unit connected to the bus or to the subunit included in the unit to detect the input plug or the source plug as the source of signal; and b) receiving the result of detection provided by the unit or the subunit receiving the signal (See Page 2 Line 21 – Page 3 Line 4).

23. In reference to Claim 2, AAPA discloses a device control method in a system comprising a unit connected to a bus including an output plug for signal output to a bus (See Page 2 Lines 13-17), said method comprising the steps of: a) signaling the unit connected to the bus to detect an input plug or a source plug as a signal source of a

designated output plug; and b) receiving the result of detection provided by the unit receiving the signal (See Page 2 Line 21 – Page 3 Line 4).

24. In reference to Claim 8, AAPA discloses the limitations as applied to Claim 1 above. AAPA further discloses the step of: c) determining whether or not a further subunit is present along a path from the output plug or along a path from the source plug as the result of detection is provided by the input plug of the unit or the destination plug of the subunit (See Page 3 Lines 5-9).

25. In reference to Claim 9, AAPA discloses the limitations as applied to Claim 1 above. AAPA further discloses the step of: c) determining whether or not a signal is processed along a path from the output g or along a path from the source plug as the result of detection is provided by the input plug of the unit or the destination plug of the subunit (See Page 3 Lines 5-9).

26. In reference to Claim 16, AAPA discloses a device control method in a system comprising a) a unit including at least one of an input plug for providing a source of signal input and an output plug for providing a source of signal output (See Page 2 Lines 13-17), and b) a subunit having at least a destination plug for providing a source of signal input and a source plug for providing a source of signal output to a bus (See Page 2 Lines 18-20), said method comprising the steps of: a) signaling at least one of the output plug of the unit and the destination plug of the subunit to designate the

source plug of the subunit as the signal source; b) establishing a signal path between the source plug and at least one of the output plug of the unit and the destination plug of the subunit; and c) determining from at least one of the unit and the subunit whether or not the signal from the source plug of the subunit is received by the destination plug of the subunit (See Page 2 Line 21 – Page 3 Line 4).

27. Claims 1-5 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by AV/C Digital Interface Command Specification, Revision 3.0 ("AV/C").

28. In reference to Claim 1, AV/C discloses a device control method in a system comprising a) a unit connected to a bus including at least one of an input plug for signal input and an output plug for providing a source of signal output (See Page 37 Section 9.2 Paragraph 2), and b) a subunit having at least one of a destination plug for inputting a signal and a source plug for signal output to the bus (See Page 37 Section 9.2 Paragraph 1), said method comprising the steps of: a) signaling the unit connected to the bus or to the subunit included in the unit to detect the input plug or the source plug as the source of signal; and b) receiving the result of detection provided by the unit or the subunit receiving the signal (See Pages 37-42 Sections 9.2-9.3).

29. In reference to Claim 2, AV/C discloses a device control method in a system comprising a unit connected to a bus including an output plug for signal output to a bus (See Page 37 Section 9.2 Paragraph 2), said method comprising the steps of: a)

signaling the unit connected to the bus to detect an input plug or a source plug as a signal source of a designated output plug; and b) receiving the result of detection provided by the unit receiving the signal (See Pages 37-42 Sections 9.2-9.3).

30. In reference to Claim 3, AV/C discloses a device control method in a system comprising a) a unit having an input plug for signal input and b) an output plug providing virtual signal output to a bus (See Page 4 Section 3.2 entry 'AV subunit' and Page 37 Section 9.2 Paragraph 2), said method comprising the steps of: a) detecting a virtual signal in a channel of the bus; and b) receiving information having the virtual signal output through the output plug in the channel from a first unit connected to the bus, wherein a relation between the first unit and a second unit is shown by the information in the virtual signal output (See Pages 37-42 Sections 9.2-9.3).

31. In reference to Claim 4, AV/C discloses the limitations as applied to Claim 3 above. AV/C further discloses the steps of: c) recognizing that the first unit is issuing a first signal; d) using a third unit connected to the bus to determine if the second unit is issuing a second signal; and e) processing the first signal by the third unit while the second signal is being issued (See Pages 37-42 Sections 9.2-9.3).

32. In reference to Claim 5, AV/C discloses the limitations as applied to Claim 4 above. AV/C further discloses that the first signal is received by at least one of the second unit and the third unit (See Pages 37-42 Sections 9.2-9.3).

33. In reference to Claim 16, AV/C discloses a device control method in a system comprising a) a unit including at least one of an input plug for providing a source of signal input and an output plug for providing a source of signal output (See Page 37 Section 9.2 Paragraph 2), and b) a subunit having at least a destination plug for providing a source of signal input and a source plug for providing a source of signal output to a bus (See Page 37 Section 9.2 Paragraph 1), said method comprising the steps of: a) signaling at least one of the output plug of the unit and the destination plug of the subunit to designate the source plug of the subunit as the signal source; b) establishing a signal path between the source plug and at least one of the output plug of the unit and the destination plug of the subunit; and c) determining from at least one of the unit and the subunit whether or not the signal from the source plug of the subunit is received by the destination plug of the subunit (See Pages 37-42 Sections 9.2-9.3).

34. Claims 1-3 and 16 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent Number 6,493,769 to Kawamura et al. ("Kawamura-769"). Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

35. In reference to Claim 1, Kawamura-769 discloses a device control method in a system comprising a) a unit connected to a bus (See Figure 3 Number 21) including at

least one of an input plug for signal input (See Figure 3 Number 23) and an output plug for providing a source of signal output (See Figure 3 Number 22), and b) a subunit (See Figure 3 Number 31) having at least one of a destination plug for inputting a signal (See Figure 3 Number 33) and a source plug for signal output to the bus (See Figure 3 Number 32), said method comprising the steps of: a) signaling the unit connected to the bus or to the subunit included in the unit to detect the input plug or the source plug as the source of signal; and b) receiving the result of detection provided by the unit or the subunit receiving the signal (See Figure 3 Numbers 41 and 42 and Column 4 Line 56 - Column 5 Line 7, Column 5 Lines 22-57, and Column 6 Lines 1-10).

36. In reference to Claim 2, Kawamura-769 discloses a device control method in a system comprising a unit connected to a bus (See Figure 3 Number 21) including an output plug for signal output to a bus (See Figure 3 Number 22), said method comprising the steps of: a) signaling the unit connected to the bus to detect an input plug or a source plug as a signal source of a designated output plug; and b) receiving the result of detection provided by the unit receiving the signal (See Figure 3 Numbers 41 and 42 and Column 4 Line 56 - Column 5 Line 7, Column 5 Lines 22-57, and Column 6 Lines 1-10).

37. In reference to Claim 3, Kawamura-769 discloses a device control method in a system comprising a) a unit (See Figure 3 Number 21) having an input plug for signal input (See Figure 3 Number 23) and b) an output plug (See Figure 3 Number 22)

providing virtual signal output to a bus (See Column 3 Lines 46-57), said method comprising the steps of: a) detecting a virtual signal in a channel of the bus; and b) receiving information having the virtual signal output through the output plug in the channel from a first unit connected to the bus, wherein a relation between the first unit and a second unit is shown by the information in the virtual signal output (See Figure 3 Numbers 41 and 42 and Column 4 Line 56 - Column 5 Line 7, Column 5 Lines 22-57, and Column 6 Lines 1-10).

38. In reference to Claim 16, Kawamura-769 discloses a device control method in a system comprising a) a unit (See Figure 3 Number 21) including at least one of an input plug for providing a source of signal input (See Figure 3 Number 23) and an output plug for providing a source of signal output (See Figure 3 Number 22), and b) a subunit (See Figure 3 Number 31) having at least a destination plug for providing a source of signal input (See Figure 3 Number 33) and a source plug for providing a source of signal output to a bus (See Figure 3 Number 32), said method comprising the steps of: a) signaling at least one of the output plug of the unit and the destination plug of the subunit to designate the source plug of the subunit as the signal source; b) establishing a signal path between the source plug and at least one of the output plug of the unit and the destination plug of the subunit; and c) determining from at least one of the unit and the subunit whether or not the signal from the source plug of the subunit is received by the destination plug of the subunit (See Figure 3 Numbers 41 and 42 and Column 4 Line 56 - Column 5 Line 7, Column 5 Lines 22-57, and Column 6 Lines 1-10).

39. Claims 1-2 and 16 are rejected under 35 U.S.C. 102(3) as being anticipated by US Patent Number 6,282,597 to Kawamura ("Kawamura-597").

40. In reference to Claim 1, Kawamura-597 discloses a device control method in a system comprising a) a unit connected to a bus (See Figure 2 Number 1) including at least one of an input plug for signal input (See Figure 2 Number 41) and an output plug for providing a source of signal output (See Figure 2 Number 44), and b) a subunit (See Figure 2 Number 22) having at least one of a destination plug for inputting a signal (See Figure 2 Number 32) and a source plug for signal output to the bus (See Figure 2 Number 33), said method comprising the steps of: a) signaling the unit connected to the bus or to the subunit included in the unit to detect the input plug or the source plug as the source of signal; and b) receiving the result of detection provided by the unit or the subunit receiving the signal (See Figure 2 Number 23 and Column 5 Line 7, Column 5 Lines 8-51).

41. In reference to Claim 2, Kawamura-597 discloses a device control method in a system comprising a unit connected to a bus (See Figure 3 Number 21) including an output plug for signal output to a bus (See Figure 3 Number 22), said method comprising the steps of: a) signaling the unit connected to the bus to detect an input plug or a source plug as a signal source of a designated output plug; and b) receiving

the result of detection provided by the unit receiving the signal (See Figure 2 Number 23 and Column 5 Line 7, Column 5 Lines 8-51).

42. In reference to Claim 16, Kawamura-597 discloses a device control method in a system comprising a) a unit (See Figure 2 Number 1) including at least one of an input plug for providing a source of signal input (See Figure 2 Number 41) and an output plug for providing a source of signal output (See Figure 2 Number 44), and b) a subunit (See Figure 2 Number 22) having at least a destination plug for providing a source of signal input (See Figure 2 Number 32) and a source plug for providing a source of signal output to a bus (See Figure 2 Number 33), said method comprising the steps of: a) signaling at least one of the output plug of the unit and the destination plug of the subunit to designate the source plug of the subunit as the signal source; b) establishing a signal path between the source plug and at least one of the output plug of the unit and the destination plug of the subunit; and c) determining from at least one of the unit and the subunit whether or not the signal from the source plug of the subunit is received by the destination plug of the subunit (See Figure 2 Number 23 and Column 5 Line 7, Column 5 Lines 8-51).

43. Claims 1-5, 8-9, and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by European Patent Application Publication Number 0 658 010 A1 to Sony Corporation ("Sony-010").

44. In reference to Claim 1, Sony-010 discloses a device control method in a system comprising a) a unit connected to a bus including at least one of an input plug for signal input and an output plug for providing a source of signal output (See Column 1 Lines 3-21), and b) a subunit having at least one of a destination plug for inputting a signal and a source plug for signal output to the bus (See Column 1 Lines 30-39), said method comprising the steps of: a) signaling the unit connected to the bus or to the subunit included in the unit to detect the input plug or the source plug as the source of signal; and b) receiving the result of detection provided by the unit or the subunit receiving the signal (See Column 10 Line 41 – Column 11 Line 49).

45. In reference to Claim 2, Sony-010 discloses a device control method in a system comprising a unit connected to a bus including an output plug for signal output to a bus (See Column 1 Lines 3-21), said method comprising the steps of: a) signaling the unit connected to the bus to detect an input plug or a source plug as a signal source of a designated output plug; and b) receiving the result of detection provided by the unit receiving the signal (See Column 10 Line 41 – Column 11 Line 49).

46. In reference to Claim 3, Sony-010 discloses a device control method in a system comprising a) a unit having an input plug for signal input and b) an output plug (See Column 1 Lines 3-21) providing virtual signal output to a bus (See Column 11 Line 41 – Column 12 Line 34), said method comprising the steps of: a) detecting a virtual signal in a channel of the bus; and b) receiving information having the virtual signal output

through the output plug in the channel from a first unit connected to the bus, wherein a relation between the first unit and a second unit is shown by the information in the virtual signal output (See Column 10 Line 41 – Column 12 Line 34).

47. In reference to Claim 4, Sony-010 discloses the limitations as applied to Claim 3 above. Sony-010 further discloses the steps of: c) recognizing that the first unit is issuing a first signal; d) using a third unit connected to the bus to determine if the second unit is issuing a second signal; and e) processing the first signal by the third unit while the second signal is being issued (See Column 2 Lines 10-51).

48. In reference to Claim 5, Sony-010 discloses the limitations as applied to Claim 4 above. Sony-010 further discloses that the first signal is received by at least one of the second unit and the third unit (See Column 2 Lines 10-51).

49. In reference to Claim 8, Sony-010 discloses the limitations as applied to Claim 1 above. Sony-010 further discloses the step of: c) determining whether or not a further subunit is present along a path from the output plug or along a path from the source plug as the result of detection is provided by the input plug of the unit or the destination plug of the subunit (See Column 2 Lines 10-51).

50. In reference to Claim 9, Sony-010 discloses the limitations as applied to Claim 1 above. Sony-010 further discloses the step of: c) determining whether or not a signal is

processed along a path from the output g or along a path from the source plug as the result of detection is provided by the input plug of the unit or the destination plug of the subunit (See Column 2 Lines 10-51).

51. In reference to Claim 16, Sony-010 discloses a device control method in a system comprising a) a unit including at least one of an input plug for providing a source of signal input and an output plug for providing a source of signal output (See Column 1 Lines 3-21), and b) a subunit having at least a destination plug for providing a source of signal input and a source plug for providing a source of signal output to a bus (See Column 1 Lines 30-39), said method comprising the steps of: a) signaling at least one of the output plug of the unit and the destination plug of the subunit to designate the source plug of the subunit as the signal source; b) establishing a signal path between the source plug and at least one of the output plug of the unit and the destination plug of the subunit; and c) determining from at least one of the unit and the subunit whether or not the signal from the source plug of the subunit is received by the destination plug of the subunit (See Column 10 Line 41 – Column 12 Line 34).

Claim Rejections - 35 USC § 103

52. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

53. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sony-010 as applied to Claim 9 above, and further in view of European Patent Application Publication Number 0 835 029 A1 to Sony Corporation ("Sony-029").

54. In reference to Claim 10, Sony-010 discloses the limitations as applied to Claim 9 above. Sony-010 does not explicitly disclose the steps of: d) determining whether or not the signal is a multiplexed signal having multiple program contents, and e) determining whether or not 1) there is a signal along the path from the output plug or along the path from the source plug and 2) whether or not part of the multiplexed signal has been extracted along the path from the output plug Or along the path from the source plug as the result of detection is provided by the input plug of the unit or the destination plug of the subunit. Sony-029 discloses determining whether or not the signal is a multiplexed signal having multiple program contents, and determining whether or not there is a signal along a path from an output plug or along a path from a source plug and whether or not part of the multiplexed signal has been extracted along the path from the output plug or along the path from the source plug (See Column 5 Line 48 – Column 6 Line 46).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to construct the device of Sony-010 with the multiplexing of Sony-029, resulting in the invention of Claim 10, in order to allow a plurality of programs to be

sent to serial bus on the same channel (See Column 5 Line 57 - Column 6 Line 4 of Sony-029), and thus it is not necessary to perform controls for setting a separate connection when selecting another program (See Column 8 Lines 30-34 of Sony-029).

55. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sony-010 as applied to Claim 9 above, and further in view of US Patent Number 5,883,621 to Iwamura ("Iwamura").

56. In reference to Claim 11, Sony-010 discloses the limitations as applied to Claim 9 above. Sony-010 further discloses determining that the signal includes video data (See Column 9 Lines 17-27). Sony-010 does not explicitly disclose the steps of: e) determining whether or not data is added to the video data of the signal along the path from the output plug or along the path from the source plug to display contents other than the video data of the signal as the result of detection is provided by the input plug of the unit or the destination plug of the subunit. Iwamura discloses determining whether or not data is added to video data of a signal along the path from an output plug or along the path from a source plug to display contents other than the video data of the signal (See Column 7 Line 47 - Column 8 Line 10).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to construct the device of Sony-010 with the determination of additional data added to video data of Iwamura, resulting in the invention of Claim 11, in order to allow a user to view a connection map or an exact topology map for the digital

system, control data transfer by clicking icons or selecting commands from pop-up menus, and understand signal flows within the network (See Column 2 Lines 8-20 of Iwamura).

Drawings

57. Figures 36 and 37 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

58. Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an

improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:

- (1) if a machine or apparatus, its organization and operation;
- (2) if an article, its method of making;
- (3) if a chemical compound, its identity and use;
- (4) if a mixture, its ingredients;
- (5) if a process, the steps.

Extensive mechanical and design details of apparatus should not be given.

59. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The

abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

60. The abstract of the disclosure is objected to because the abstract makes reference to "the device control method" which is equivalent to making reference to "this invention"; the abstract further makes reference to purported merits of the invention in making reference to controlling connection of each unit efficiently. Correction is required. See MPEP § 608.01(b).

61. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

62. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Priority

63. Acknowledgment is made of applicant's claim for foreign priority based on an applications filed in Japan on 6 July 1999, 6 September 1999, and 19 November 1999. It is noted, however, that applicant has not filed a certified copy of the Japanese applications as required by 35 U.S.C. 119(b).

Information Disclosure Statement

64. The information disclosure statements (IDS) submitted on 3 January 2002, 12 April 2007, and 15 April 2008 are in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Election/Restrictions

65. Applicant's election without traverse of Claims 1-5, 8-11, and 16 in the reply filed on October 2008 is acknowledged.

66. Claims 6-7, 12-15, and 17-22 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Claims 23-24 have been previously cancelled in the

preliminary amendment filed 1 May 2002. Election was made **without** traverse in the reply filed on 20 October 2008.

Conclusion

67. The following art made of record and not relied upon is considered pertinent to applicant's disclosure: US Patent Number 7,240,113 to Barry et al; US Patent Number 6,813,659 to Osakabe et al.; US Patent Number 6,810,199 to Horiguchi et al.; US Patent Number 6,631,426 to Staats; and AV/C Disc Subunit General Specification, Revision 1.0.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas J. Cleary whose telephone number is (571)272-3624. The examiner can normally be reached on Monday-Thursday (7-3).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart can be reached on 571-272-3632. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Thomas J. Cleary/
Patent Examiner, Art Unit 2111